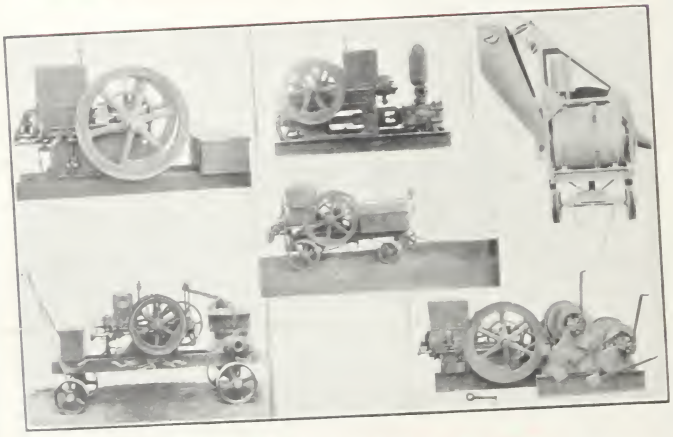
Atlas

CONCRETE FACTS

CONTRACTORS' POWER DRIVEN EQUIPMENT
AIR COMPRESSORS AND POWER PLANTS



CHRIS D. SCHRAMM & SON
PHILADELPHIA, U. S. A.

The Best Service at Reasonable Cost

Atlas

Concrete Mixer

The Machine You Ought to Own

Built for Hard Service

Atlas Engineering Company
Milwaukee, Wisconsin
1919

Atlas

To Our Patrons

THIS issue of our catalog fully illustrates and describes the Atlas line of Mixers, Wagon Loaders, and other contractors' equipment.

Building, like all other lines of business, requires the shortest time and the most economical ways to do the work to make it profitable for the contractor; and owing to the large number of highways, bridges and railroads to be built, and very many of them in allotted time, antiquated methods of doing the work had to be discarded.

The up-to-date contractor's work is now made easier for him, by reason of the distinctive gains in methods used and labor saving equipments placed at his disposal. He has learned how to save time in the use of such equipment and how to get double duty out of it, in short, how to do work in two days that used to take four.

The Atlas Mixers and Wagon Loaders meet these new conditions, which is so vital to your business success, and to the speed, economy and profitableness of your jobs.

Atlas Mixers have been sold all over the world for a number of years and many improvements have been made on them to meet the requirements and conveniences of the users. We build all of our Mixers as simple as possible, for complicated machines mean trouble sooner or later.

All Atlas Mixers are built along the same lines, which means efficiency in production and quality in machines. And the name ATLAS stands for durability, therefore before buying your Mixer, examine the Atlas line and you will find just what you are looking for.

ATLAS ENGINEERING COMPANY

General Office and Factory

MILWAUKEE, WISCONSIN, U. S. A.

Branch Offices in Various Parts of the United States.

Why You Should Buy an Atlas Mixer

ATLAS MIXERS are designed for the one purpose of making them the strongest and best built mechanically, at the same time insuring the most thorough mix of the batch in the shortest possible time. The real value of a Mixer is its ability to properly mix and rapidly discharge the batch, combined with simplicity and durability. These are all Atlas features.

The capacity of all Mixers varies so much with the consistency of the concrete that it is difficult to give an actual rating on a machine per day; also the length of time required to thoroughly mix a batch can not be definitely determined without a knowledge of the rock, sand and water used.

A conservative rating, however, on Atlas Mixers is as follows:

No. 3 A, 3 cubic feet
No. 3 B, 3 cubic feet
No. Jr., 5 cubic feet
No. 56 A, 5 cubic feet
No. 56 B, 5 cubic feet
No. 80 A, 8 cubic feet
No. 80 B, 8 cubic feet
No. 11 A, 11 cubic feet
No. 11 B, 11 cubic feet
No. 16 B, 16 cubic feet
No. 21 B, 21 cubic feet

The building of Concrete Mixers has reached so high a state of development that innovations rarely represent improvements. We have, therefore, chosen no "novel feature in design" to be tried out by our customers, but by adhering to what we know to be good, have worked out a standardized design that is original and distinctive.

We claim that there is no better design or construction to be obtained at any price and we know that a comparison with all other machines will convince you of the superior merits of the Atlas Mixer, and of the truth of our statements.

Standardized manufacture, employed in the production of Atlas Mixers, gives a uniformity of product that cannot possibly be obtained where machines are built singly or in small lots. It permits of systematic inspection and insures a product being practically perfect before leaving the factory, guaranteeing interchangeability of parts and prompt service in the shipment of repairs.

Atlas

The Atlas Junior

THE Atlas Junior is a 5 foot Capacity Batch Hopper Machine. The Atlas Junior is simply the rear half of the 56-A Atlas, correctly mounted, and is adapted where contractors have their own power. This machine is also useful for farm work in the mixing of feed, fertilizer, or in fact, for any mixing purpose whatsoever. The machines is easily moved by hand with handles for the purpose. It has a capacity, if ample power is used, of fifty cubic yards a day. It can be loaded on a small wagon or pulled behind with ease, as it is very light and has large wheels.

56-A ATLAS MIXER

THE frame of the 56-A Atlas Mixer is made of a very heavy section 4 inch channel, reinforced at the corners and hot riveted, supported in the center by two very strong angles, making it a very rigid construction.

All axles are of cold rolled steel and carefully inspected before going on to the machine, to make sure that there are no flaws in the material.

Wheels on all Atlas Mixers are very heavy, with staggered spokes and grooved tires, and have a large hub, equipped with large grease cups.

As is well known, the most important part of a concrete mixer is the drum. After years of experimenting we have finally developed, and are now building, a drum that gives the most thorough mix to the material in the shortest possible time.

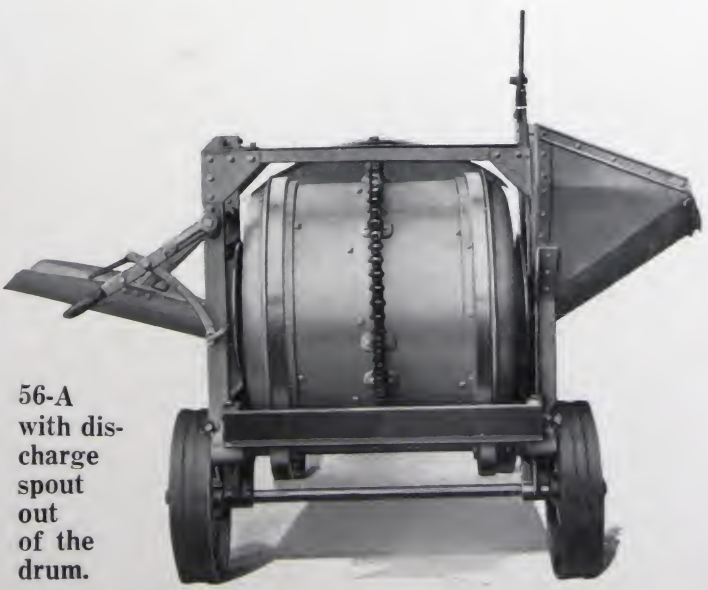
All of our drum ends, or heads, are of semi-steel, rounded in shape, and have large drip rings cast at the openings, which prevents any slopping over of the material, and getting on the roller tracks or bearings. The round end drum is much easier to keep clean than any of the straight end drums.

The track on drum heads are accurately machined, which insures perfect and smooth running of drum.

Center sheet is of very heavy boiler plate, buckets and blades are cast semi-steel, both heavy and large which assures a thorough mix and rapid discharge. The buckets and blades are bolted on; spring lock washers being used to prevent them from working loose.

On ***all*** Atlas Mixers the drum rollers are large and cast of semi-steel, surface chilled, which assures long life. Roller shafts are heavy cold rolled steel, held rigid in boxes and shaped to fit below the frame. The rigid construction of the frame makes it impossible for the shafts to get out of alignment.

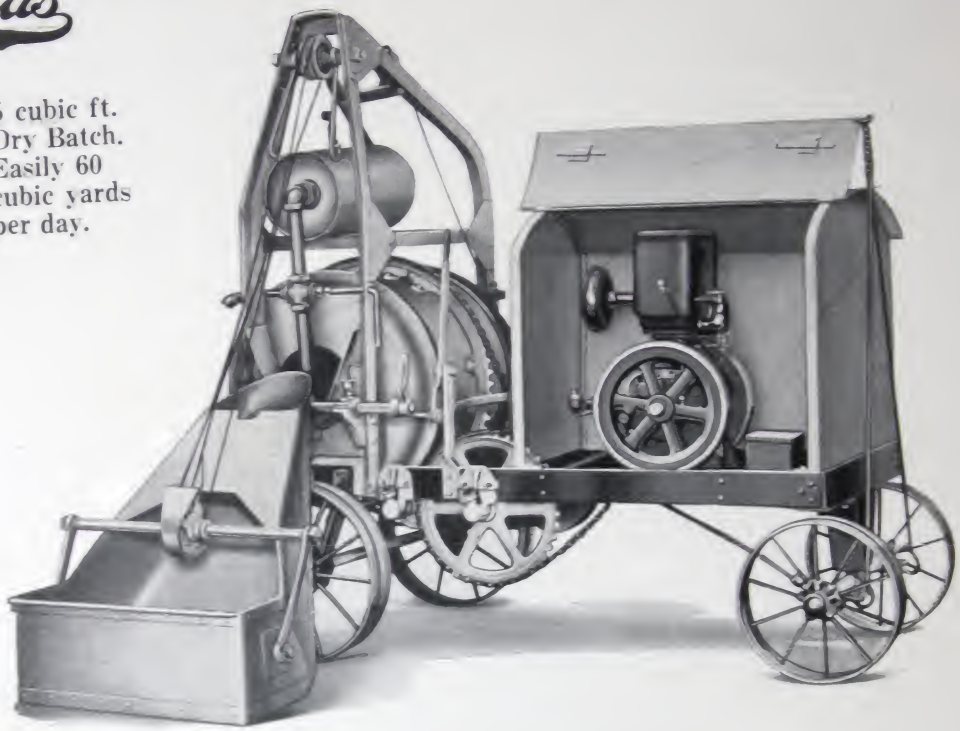
Bearings on ***all*** Atlas Mixers are dust and dirt proof, have large grease pockets and require very little attention to prevent them from running dry, thus assuring smooth running.



56-A with discharge spout out of the drum.

Atlas

5 cubic ft.
Dry Batch.
Easily 60
cubic yards
per day.



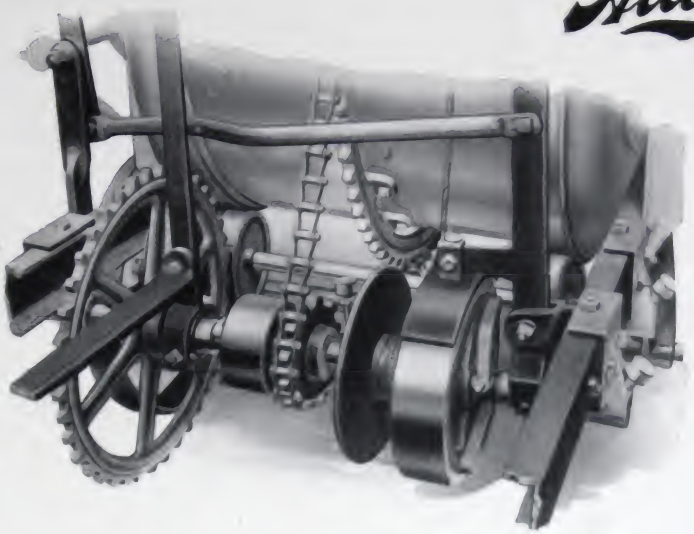
56-B ATLAS MIXER

IN CONNECTION with our Power Loader we call attention to the fact that on ***all*** Atlas Mixers so equipped, one man is able to take care of the raising and lowering of the Power Loader, and can also operate the Power Loader from the discharge spout side. This is done by a simple hand lever. This means the saving of one man in the operation of the Atlas Mixer. The Side Loader is made of very heavy blue annealed steel, reinforced on the top and side. All machines so equipped with Power Loader are furnished, without extra charge, with auto clutch release, which disengages clutch when hopper reaches proper height for discharging material into the drum. This is a very important device, as it prevents any possible damage, should the operator's attention be called elsewhere. When in an elevated position the skip is at an angle of 52 degrees, assuring a rapid and complete discharge of the material.

The above cut shows our Atlas Mixer 56-B with Power Loader. The tower is of very strong construction, made of two $2\frac{1}{2}$x$\frac{1}{4}$ inch angles, reinforced at the joints by very heavy gusset plates and hot riveted. In constructing the Power Loader we have again combined Atlas simplicity and durability.

Material Hoist for 56-B Mixer

THE hoisting drum and clutch are mounted on the main driving shaft, eliminating the necessity for additional shafts and gears. When the skip reaches the upright position it disengages the hoisting drum and the downward movement of the skip is easily checked or stopped by a brake.



The Clutch

THE clutch on all Atlas Mixers is of the simple expanding ring type, same as the emergency brake used on all modern autos, and is large enough to transmit many times the power required to revolve the drum. Very efficient and easily adjusted and will last the life of the mixer.

The Batch Hopper

THE Batch Hoppers on all Atlas Mixers are made of extra heavy material, well braced and will stand rough usage and are built in the following sizes:

For Junior
For 56-A
For 80-A
For 11-A

The Bearings

ALL the bearings on Atlas Mixers are enclosed and are absolutely dust and dirt proof. By this protection of the bearings, Atlas Mixers require only 40 per cent of the power developed by its engine.

Atlas

The Atlas Mixer in Operation

Hoists and mixes at the same time

Build silos any height

Bucket drops right under spout

ATLAS MIXER, equipped with hoist for silo work or hoisting material up into buildings, can be furnished with all models of Atlas Mixers at small additional cost. ***One lever operates both hoist and brake—no chance to get confused and pull wrong lever.*** You will like this machine if you have any hoisting to do.

A FEATURE that should interest you is the low charging measuring Batch Hopper. No platform necessary on our No. 56-A Atlas. Hopper is at proper shoveling height.

This illustration shows the low charging feature of the 5-A Atlas and the quick discharge. It takes one minute from the time the material is put into the Hopper to go through the drum and come out a thoroughly mixed batch of concrete.

80-A ATLAS MIXER

With Wheeling Plank and Platform. Capacity 8 Cubic Feet Dry Batch; 80 Cubic Yards Per Day.

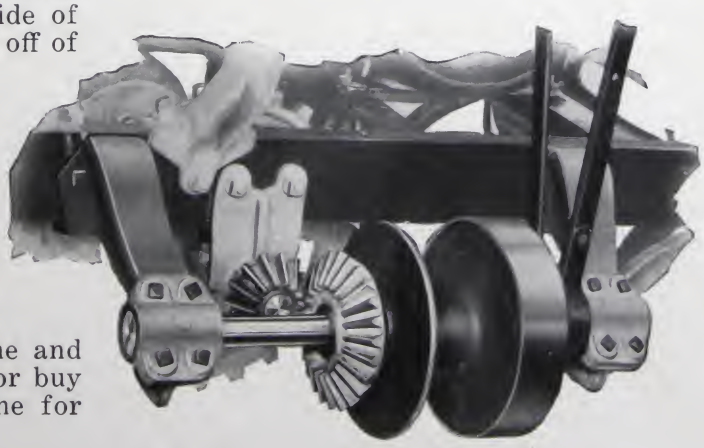
THIS machine is built the same as No. 80-B with the exception that wheelbarrow chute, or measuring batch hopper is furnished instead of power loader. We recommend the batch hopper for the reason that more batches can be turned out. The hopper holds one complete batch, and is separated from the drum by a steel slide, which makes it possible to assemble a complete batch in hopper while the drum is mixing one batch. You can readily see that there is no lost motion on this type of mixer.

Furnished with wheelbarrow chute; platform and runways not furnished unless specified.

We recommend measuring batch hopper shown above because it means rapid mixing, more batches and more profit.

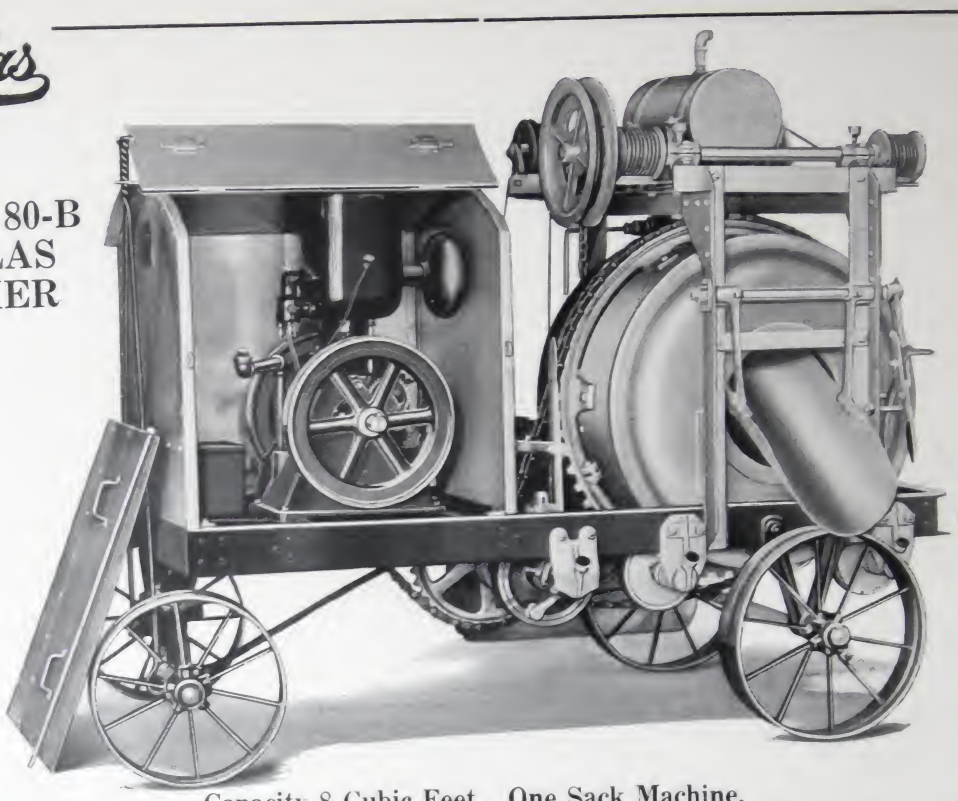
The Atlas Material Hoist

The ATLAS Material Hoist can be attached to the side of the mixer and is operated off of the main drive shaft by beveled gears, which reduces the speed of the hoisting drum so that its lifting power is tremendous. By the simple attaching of this Hoist, which is furnished for a nominal charge, you have two machines (Mixer and Hoist) in one and you do not have to own or buy an extra hoisting machine for light loads.



Atlas

NO. 80-B ATLAS MIXER



Capacity 8 Cubic Feet. One Sack Machine.

EQUIPPED with automatic clutch release, which disengages clutch when hopper reaches the proper height for discharging material into drum. This is a very important device as it prevents any possible damage to mixer should operator's attention be called elsewhere. This is furnished on all Atlas Power Loader machines without extra cost.

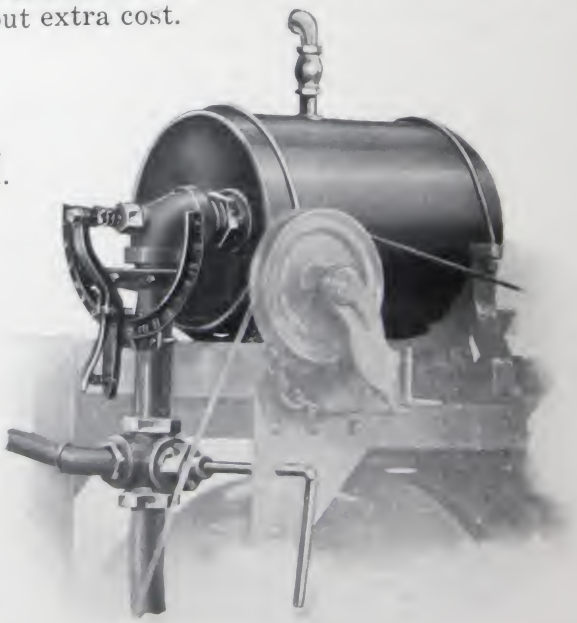
FRAME

Length of frame, 8 feet 2 inches.
Width of frame, 34 inches.
Frame of 5 in. channel, 9 lb. section.
Axles high carbon cold rolled steel.
"Ideal" Engine complete housed.
Chain used steel roller No. 2000.
Friction clutch for stopping drum.

DRUM

32 inches long, 36½ inches high.
Opening 15 in., capacity 8 cubic ft.
Drum head of cast semi-steel.
Machined track.
Drum sprocket cast in sections.
Drum rollers chilled semi-steel 9 inches diameter, 2 inch face.
Height of tower 5 feet 6 inches from ground.

Furnished with power loader, can be operated from either side of machine.



SKIP

Will hold more than the required batch, its well rounded edges and the large diameter at the end entering the drum, are the reasons for rapid loading. Skip is built of heavy material and well braced.

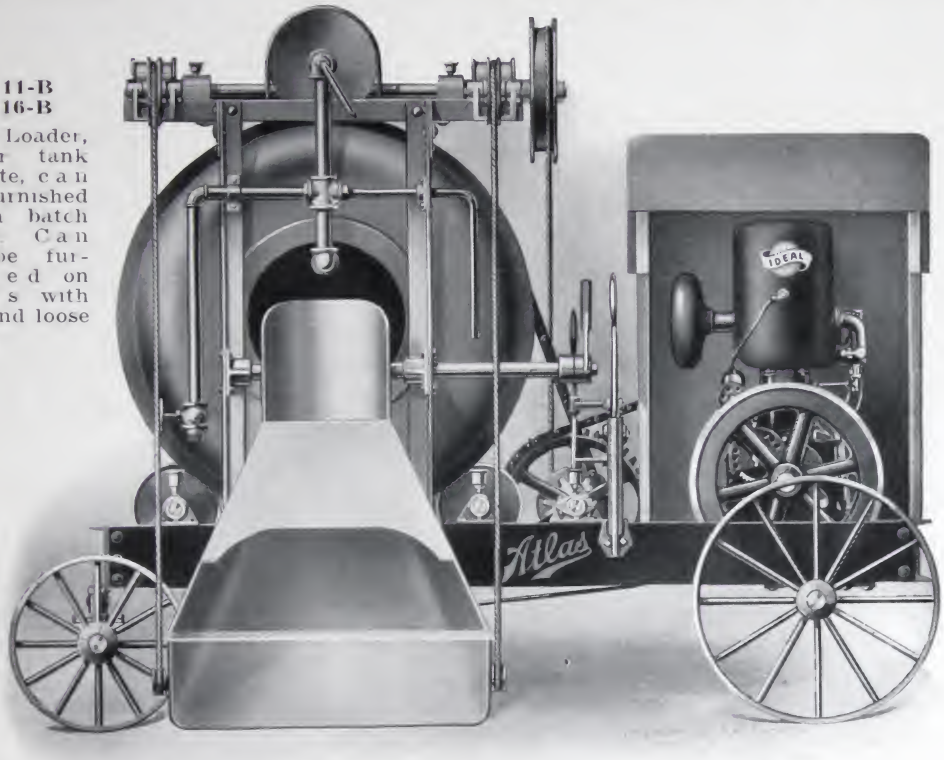
WATER TANK

All Atlas Mixers with power loaders are furnished with special water tanks, either open top or closed pressure type as regular equipment. Water tanks can be furnished on batch hopper machines at small extra cost.

A Big Machine for Large Work

No. 11-B
No. 16-B

Power Loader, water tank complete, can be furnished with batch hopper. Can also be furnished on skids with tight and loose pulley.



Specifications No. 11-B

Capacity 12 cubic feet

Drum of cast semi-steel, with accurately machined tracks and deep protecting flange. Drum is 48 inches in diameter and 28 inches long. Its speed is 19 R. P. M. The machine tracker surfaces are 3½ inches, which gives unusual large wearing surface on rollers. Has cast drip ring at openings, preventing sloppage getting on rollers.

The chain drive is steel bushed roller chain, 25,000 pounds working strain. The drum sheet between the two heads is of No. 10 gauge steel. The mixing blades and buckets are heavy cast semi-steel and bolted on drum sheet, lock washers being used.

Drum rollers are chilled, semi-steel. They are 12 inches in diameter and 3½ inches wide. They are keyed to the shaft, which in turn is supported with bearings 6 inches long. Impossible for rollers to wobble and throw the drum out of line.

Frame is of channel steel 6 inches and heavy section. The tower is of 3½x3½ inch heavy angles with large gusset plates reinforced to take all strain and twist.

Truck is all steel—three point suspension.

Wheels—20x6 inch front; 24x6 inch rear. Wider tires can be furnished if desired.

Clutches—expanding ring type, very efficient and simple to adjust.

High carbon cold rolled steel shafting and axles used on all Atlas Mixers.

Hopper—We can furnish open or closed end type, rounded corners, large openings, which makes possible very rapid loading of machine. Either size machine can be furnished with batch hopper or wheelbarrow chute.

Power—"Ideal" Engine 6 H. P., covered with strong steel housing, arranged so it can be locked up when not in use, preventing anyone from tampering with engine.

Water tanks furnished as regular equipment on all Atlas Mixers with power loaders, either open top or closed pressure type.

Specifications No. 16-B

Capacity 16 cubic feet

No. 16-B Atlas is made practically the same as the No. 11-B. Of course the drum and hopper are larger and working parts made heavier.

Drum—48 inches in diameter, 34 inches long.

Drum Rollers—12 inches in diameter, 3½ inch face.

Frame 6 inch channel, 13½ pound section.

Tower 3½x3½ inch angle, very heavy and thoroughly braced.

Power—"Ideal" gasoline engine, 10 H. P., covered with steel housing.

Steam engine and boiler can be furnished on the No. 11 and No. 16 at additional price.

Atlas

WE HAVE adopted and are using exclusive chain drive, this being the most economical and reliable method of any drive used on Concrete Mixers. Chain is far more practical than gears because they are smoother running, causing less friction and require less driving power, show less wear and give greater length of service.

The engine is the heart of any power driven machine. We have done a great deal of experimenting at our own expense. What is more exasperating or expensive than to have an engine fall down on a large rush contract, with men standing idle. This is a case where everything stops but the expense. A few such stops and the lost time and expense will more than make up for the difference between the cost of an engine of quality and an inferior, poorly constructed engine. We have not tried to adopt a general purpose engine, but have concentrated our efforts to find one adapted to mixer work. As a result we have chosen as standard power for the Atlas Mixer the "Ideal Constant Service Power" engine. However, we will furnish on request horizontal engines. Remember, no ordinary engine will do; mixing concrete is hard work and requires engines built for that service.

The engine housing is made of No. 16 sheet steel, riveted with ¼ inch rivets onto 1¼ inch angle iron, so constructed that one side of the housing can be opened when engine is started, and securely locked when machine is standing idle or being transported. An opening, with cover attached on top of housing, allows the filling of the engine hopper to be done very easily. Here we also feature Atlas construction, simplicity, lightness and durability.

Electric Motors. To quote correct prices on Mixers equipped with Electric Motors we must know voltage, and whether direct or alternating current is to be used. We do not carry a stock of motors, and sufficient time must be allowed to secure same from the factory.

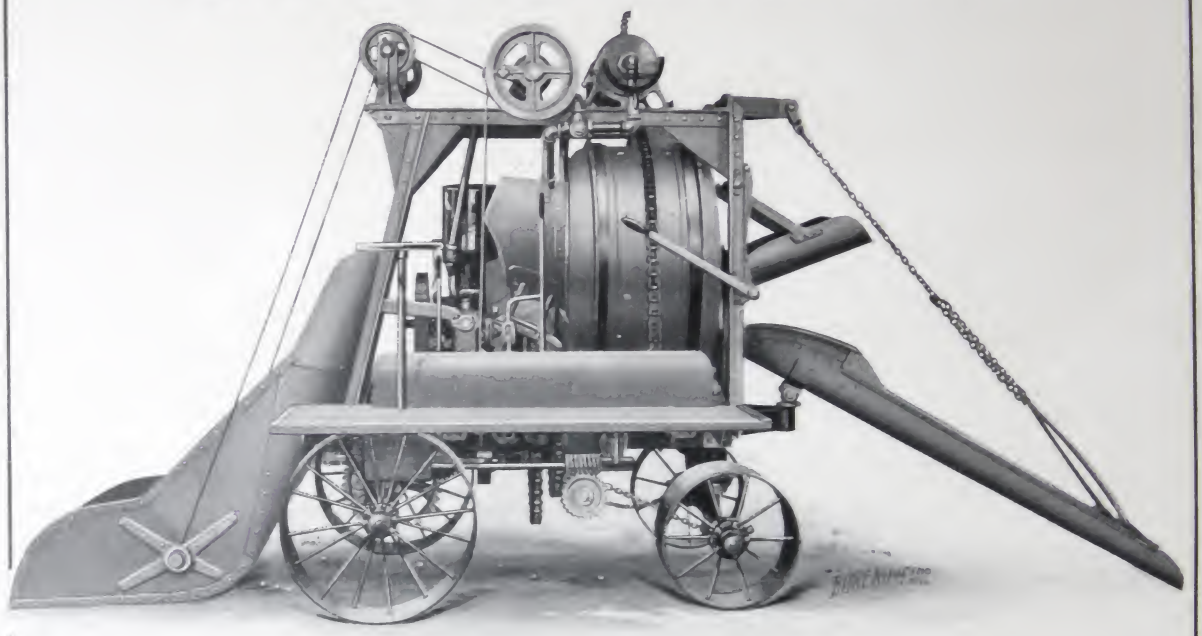
A machine expected to give the best of service requires not only correct mechanical construction, but also the proper finishing. The best mechanical and most expensive machine built will look cheap unless finished off accordingly. Here again we pride ourselves in using only the best paint, varnish, etc., that money can buy. Each machine receives three coats of paint before leaving our factory.

TYPE ATLAS	3-A
Capacity Dry Basis	3′
Capacity Wet Basis	2′
Mixing Drum—length	28′
Mixing Drum—diameter	22′
Mixing Drum—hole	16′
Drum Rolls—diameter	7″
Drum Rolls—face	1″
Frame Channels—heavy sect	
Frame Channels—length	
Frame Channels—flange	
Front Wheels—diameter	
Front Wheels—face	
Rear Wheels—diameter	
Rear Wheels—face	
Front Wheel Axle—length	
Front Wheel Axle—diameter	
Rear Wheel Axle—length	
Rear Wheel Axle—diameter	
Loader Capacity	
Size of Power Loader—length	
Size of Power Loader—width	
Size of Power Loader—depth	
Size of Batch Hopper—length	
Size of Batch Hopper—width	
Size of Housing—length	
Size of Housing—width	
Size of Housing—height	
Power Required to Operate	1 h.
Engine—make	Opti
Speed—R. P. M.	
Bore	
Stroke	
Diameter of Flywheel	
Weight of Engine	
Weight of Truck	
Weight of Mixer	450
Weight of Mixer and Engine without Truck or Housing	
Weight of Mixer and Engine on Truck without housing	
Weight of Engine and Housing without Truck	
Weight of Engine and Housing with Truck	
Weight of Mixer with Side Loader	
Weight of Mixer with Batch Hopper, without engine and Housing	
Weight of Outfit—complete	450
Size of Outfit—length over all	
Size of Outfit—width over all	37
Size of Outfit—height over all	52

3-B	5 Jr.	56-A	56-B	80-A	80-B	11-A	11-B	16-A	16-B	21-B
3′	5′	5′	5′	8′	8′	12′	12′	16′	16′	21′
2′	3½′	3½′	3½′	6′	6′	10′	10′	14′	14′	19′
28″	31½″	31½″	31½″	32″	32″	40″	40″	34″	34″	44″
22″	30½″	30½″	30½″	36½″	36½″	42½″	42½″	48″	48″	48″
16″	13½″	13½″	13½″	15″	15″	.....	.....	20″	20″	20″
7″	7″	7″	7″	9″	9″	10″	10″	12″	12″	.....
1″	2″	2″	2″	2″	2″	2¼″	2¼″	3½″	3½″	.....
.....	4″	4″	4″	5″	5″	6″	6″	6″	6″	.....
.....	5′ 6″	6′ 6″	6′ 6″	7′ 6″	7′ 6″	8′ 6″	8′ 6″	8′ 9″	8′ 9″	.....
.....	1 9-16″	1 9-16″	1 9-16″	1¾″	1¾″	1 15-16″	1 15-16″	1 15-16″	1 15-16″	.....
10″	.....	18″	20″	20″	20″	20″	20″	20″	20″	.....
2″	.....	5″	5″	5″	5″	5″	5″	6″	6″	.....
15½″	.....	24″	.....	24″	24″	26″	26″	24″	24″	.....
2″	3½″	5″	5″	5″	5″	5″	5″	6″	6″	.....
.....	.....	41½″	41½″	52″	52″	66″	66″	66″	66″	.....
1¼″	.....	1⅝″	1⅝″	1⅝″	1⅝″	2¼″	2¼″	2¼″	2¼″	.....
.....	53¾″	53¾″	53¾″	52″	52″	66″	66″	66″	66″	.....
.....	1⅝″	1⅝″	1⅝″	1⅝″	1⅝″	2¼″	2¼″	2¼″	2¼″	.....
.....	5½′	5½′	5½′	8′	8′	12′	12′	16′	16′	.....
.....	.....	.....	55½″	.....	58″	.....	.....	.....	.....	.....
.....	.....	.....	32″	.....	33″	.....	.....	.....	.....	.....
.....	.....	.....	13″	.....	15″	.....	.....	.....	.....	.....
.....	37″	37″	.....	45″	.....	.....	53″	.....	.....	.....
.....	21¼″	21¼″	.....	25″	.....	.....	32″	.....	.....	.....
33″	.....	34″	34″	32½″	32½″	.....	.....	.....	.....	.....
20″	.....	36″	36″	36″	36″	.....	.....	.....	.....	.....
32½″	.....	33½″	33½″	37½″	37½″	.....	.....	.....	.....	.....
1 h. p.	2½ h. p.	2½ h. p.	3 h. p.	4½ h. p.	4½ h. p.	6 h. p	6 h. p.	10 h. p.	10 h. p	.....
Fairbank Mor e	Option'l	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	.....
500	.....	525	525	475	475	450	450	400	400	.....
3½″	.....	4½″	4½″	5″	5″	6″	6″	7″	7″	.....
5″	.....	5½″	5½″	6″	6″	6½″	6½″	9″	9″	.....
17″	.....	18″	18″	19¼″	19¼″	23¾″	23¾″	30″	30″	.....
200 lb.	.....	450 lb.	450 lb.	550 lb.	550 lb.	900 lb.	900 lb.	1625 lb	1625 lb	.....
175 lb.	165	365 lb.	365 lb.	414 lb.	414 lb.	565 lb.	565 lb.	615 lb.	615 lb	.....
450 lb.	885	1100 lb.	.....	.....	.....	.....	.....	.....	.....	.....
650 lb.	.....	1550 lb.	2050 lb.	2286 lb.	2536 lb.	.....	.....	.....	.....	.....
825 lb.	.....	1915 lb.	2415 lb.	2700 lb.	2950 lb.	.....	.....	.....	.....	.....
250 lb.	.....	585 lb.	585 lb.	700 lb.	700 lb.	.....	.....	.....	.....	.....
425 lb.	.....	950 lb.	950 lb.	1114 lb.	1114 lb.	.....	.....	.....	.....	.....
.....	.....	.....	1600 lb.	.....	1986 lb.	.....	.....	.....	.....	.....
.....	.....	1450 lb.	.....	1736 lb.	.....	.....	.....	.....	.....	.....
900 lb.	1050 lb.	2050 lb.	2550 lb.	2850 lb.	3100 lb.	4200 lb.	4850 lb.	5500 lb.	6300 lb.	.....
66″	66″	86″	86″	104″	104″	9′ 4″	9′ 4″	9′ 8″	9′ 8″	.....
37″	61″	61″	61″	75″	75″	7′ 6″	7′ 6″	7′ 6″	7′ 6″	.....
58″	62″	62″	87½″	66″	94″	5′ 6″	7′ 10″	.....	.....	.....

Atlas

For Full Particulars on This Big Husky Paver--Send for Bulletin No. 71



ATLAS N. 14-R PAVER

FURNISHED with Traction or without, as desired. As many Trap Doors in Distributing Spout as you want.

Specifications

Capacity per batch in cubic feet unmixed material, 16 cubic feet.

The Paver handles two bag batch of 1-3-4 or two bag batch of 1-2-5.

Capacity per hour in cubic yards, mixed material, 25 cubic yards.

Capacity per hour in square yards 6-inch concrete, 150 square yards.

Horse Power furnished gasoline Ideal, 10 H. P.

Horse Power furnished electric motor, 8 H. P.

Horse Power furnished steam, 6 H. P.

Horse Power furnished steam boiler, 8 H. P.

Weight of 14 foot Paver, gasoline engine, 9,300 pounds.

Weight of 14 foot Paver, steam engine and boiler, 10,500 pounds.

APPROVED

by those most competent to judge —The CONTRACTORS

READ these letters, write to any one of them, they will be glad to tell you more about their Atlas Mixer.

MR. J. H. PECK—CONTRACTOR,
Ordway, Colo.

Gentlemen:

I wish to thank you for the interest you have shown me, and will take pleasure to recommend Atlas Service and Mixers.

Yours respectfully,
J. H. PECK.

S. NORDVIG—BUILDER,
Capron, Ill.

Dear Sirs:

Received your letter of Jan. 27th. I wish to reply our Mixer, bought in 1915, is yet in first class condition and does excellent work.

Yours respectfully,
S. NORDVIG.

WEEKS & SEVERSON,
Builders and Contractors,
Coeur d'Alene, Idaho.

Gentlemen:

We are in receipt of your letter giving us information on improvements for the five-foot Atlas Mixer. The mixer we purchased from you in 1914 has given us the best of service.

Please quote us prices on your new Mixers, as we may be in the market for a new machine later on.

Yours truly,
WEEKS & SEVERSON,
By Frank Weeks.

JACOBSON BROS.
Duluth, Minn.

The Atlas No. 8-B bought through your dealers here is giving us splendid service, **there is no better mixer in Duluth than the Atlas.**

JACOBSON BROS.

THE ROAD SUPPLY & METAL CO.,
Topeka, Kans.

Gentlemen:

We are very much pleased with the Atlas line and can see no reason, under favorable conditions, why we will not be able to work up a mighty good business for the coming year.

Yours very truly,
THE ROAD SUPPLY & METAL CO.

OMAHA STRUCTURAL STEEL BRIDGE CO.,
Engineers & Contractors.
Omaha, Nebr.

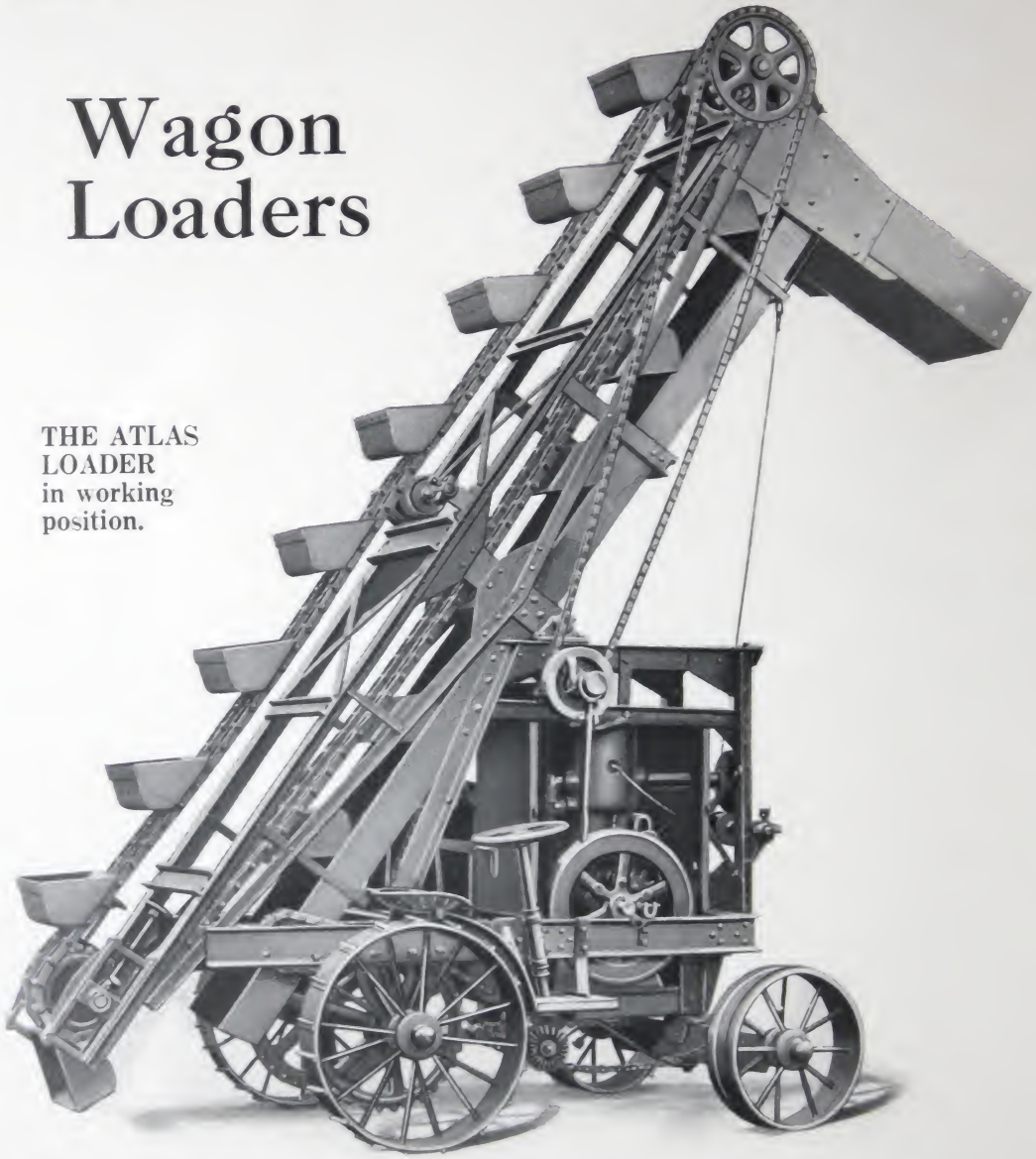
Gentlemen:

We are interested in the sale of your line of concrete mixers; in fact, the two Atlas Mixers which we have have proven very satisfactory to us, and there is no reason why your Mixer should not sell well in this locality. Kindly quote us your best jobber's discount and give us any other general information we may need.

Yours very truly,
OMAHA STRUCTURAL STEEL BRIDGE CO.

Atlas

Wagon Loaders



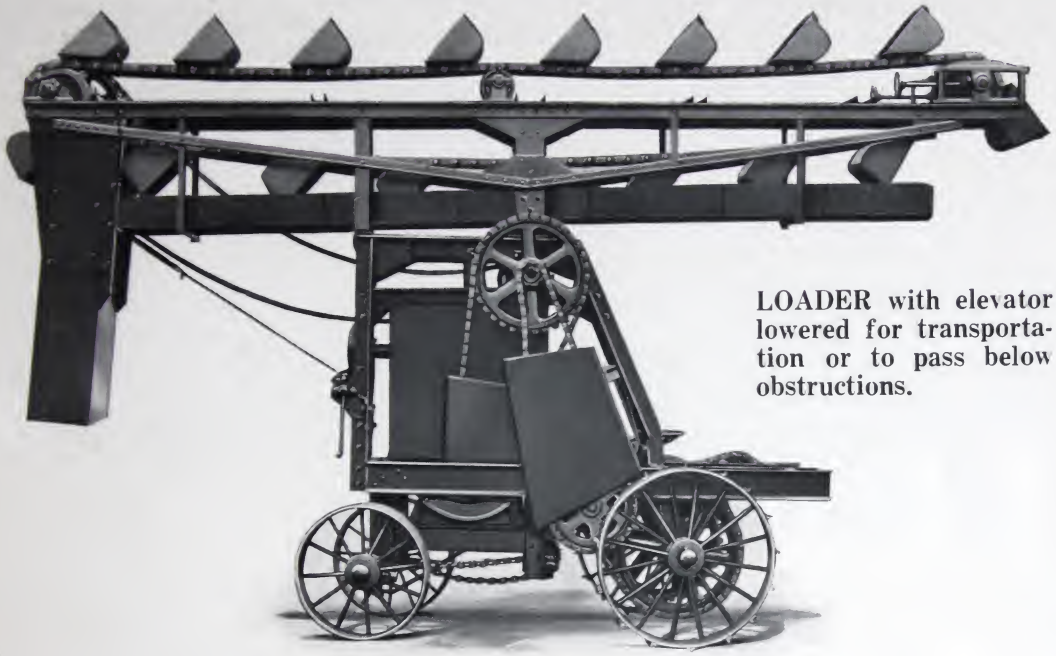
THE ATLAS LOADER in working position.

THE ATLAS SELF-PROPELLING WAGON LOADER is another typical example of the Atlas idea of simplicity and durability. On account of the self-propelling feature the loader can be moved about on its own power. This feature makes it possible to tackle the pile of material to be loaded from different angles. It is the kind of a labor saving machine that coal dealers and building material dealers have been looking for.

THE ATLAS LOADER is not only simple in construction, but built very strongly, so as to withstand all kinds of hard usage. It is built entirely of steel and iron, therefore weather conditions will not affect it. It can be furnished with either Gasoline Engine with Magneto, or Electric Motor. If the latter, we must know current and voltage, etc., available.

THE ATLAS LOADER is able to handle almost any amount of material that is delivered to the foot of the conveyor.

Atlas Loader



LOADER with elevator lowered for transportation or to pass below obstructions.

The illustrations show the Loader in a working position, also with the elevator lowered for transportation, or to pass below obstructions. To appreciate all of the special features and the strong and simple construction one must see the machine. It is to the advantage of ever prospective purchaser, before buying, to carefully investigate the Atlas Loader as to design, material and workmanship, and be convinced that it will do the work.

Specifications on Wagon Loader:

Frame—Six inch Channel, very strong, hot riveted throughout.

Buckets—Made of No. 10 Blue Annealed Steel, reinforced on edge, bolted with eight bolts to double line of very strong chain. Buckets for handling coal 18x8½x13. To handle other material can be furnished any size to suit.

Chain—On traction No. 508 Roller Chain; on elevator No. 506 Roller Chain; on buckets No. 102 Steel Roller Chain.

Drive—Eight horsepower Gasoline Engine or six horsepower Electric Motor. In case the latter we must know what current and voltage is available.

Wheels—Twenty-six by eight inches in front; 36x8 inches in rear.

Screen—One screen is furnished with each Loader. Extra screen at additional cost.

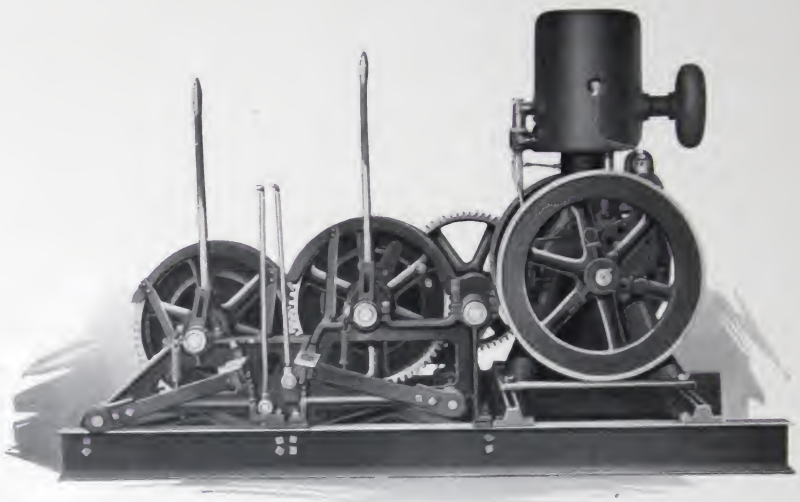
Capacity—One ton or more per minute, providing material is delivered to the foot of elevator at this rate.

Height—With elevator in working position 14 feet 6 inches.
With elevator lowered for transportation 11 feet.

Drive—Chain drive from friction clutch on counter shaft.

Speed—One and one-quarter miles per hour on road.

Weight—7,500 pounds.



IDEAL DOUBLE DRUM HOISTS

These hoists are mounted on steel channels, for strength and light weight.

The double drum hoists are equipped with ratchet so that the drum may be held with the load on if desired and the nigger head run independent of the drum.

The bearings are of liberal dimensions and provided with liners for taking up wear. All hand levers and foot brakes are centrally located for the convenience of the operator.

Just the outfit for operating drag lines, pile drivers, mine work and general hoisting.

Specifications:

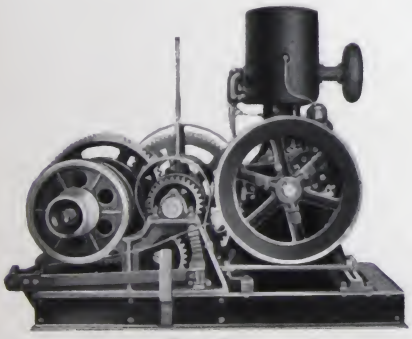
Hoisting Outfit	Number	8-2H	10-2H
Horse power of engine		8	10
Floor space	inches	43 x 82	43 x 82
Diameter of drums	inches	6	6
Length of drums	nches	12	12
Diameter of brake drum	inches	19¾	19¾
Width of brake band	inches	3	3
Diameter of shafts	inches	1¾	1¾
Weight with engine (net)	pounds	2500	3300
Shipping weight with engine	pounds	2700	3500
Drums hold ½-inch cable	feet	400	400
Will lift	pounds	2300	2900
Feet per minute		100	100

We can furnish gears that will operate the drum as slow as 70 feet per minute or as fast as 140 feet per minute

Ideal Light Duty Reversible Single Drum Hoist

Our Light and Heavy Duty Reversible Single Drum Hoists have the same general design. We do not, however, recommend our light hoists for heavy work, as the hoist is considerably lighter as will be noted in the following specifications

Outfit No.	450	600	Brake surface, inches	2x30	2x30
Horse-power of engine	4½	6	Diameter of clutch shaft, inches	1½	1½
Floor space, inches	26x56	26x56	Drum holds ½-in. cable, feet	500	500
Hoisting drum diameter, inches	8	8	Cable speed on drum, feet	75	125
Hoisting drum length, inches	15	15	Will lift, pounds	1000	1000
Elevator cable sheave, inches	12	12	Shipping weight, pounds	1250	1550



Type B.

Heavy Duty Ideal Type "B" Single Drum Reversible Hoist

Specifications of Type "B" Hoists

Hoisting outfit	Number	6RH	8RH	10RH
Horse-power of engine		6	8	10
Floor space Type "B" (over all	approximate inches	53x72	53x72	53x72
Diameter of drum	inches	8½	8½	8½
Length of drum	inches	15½	15½	15½
Hoist sheave diameter	inches	12	16	18
Will lift back geared 9 to 1	pounds	1020	1200	1430
Feet per minute		165	196	207
Will lift back geared 12 to 1	pounds	1360	1620	1900
Feet per minute		125	146	155
Weight with engine (net)	approximate pounds	2400	2650	3350
Shipping weight with engine	approximate pounds	2550	2800	3600
Drum holds ½-inch cable	feet	700	700	700

In ordering be sure and specify number and type of hoist

We also carry other Hoists and Contractors' Machinery. Tell us your requirements and we will be glad to give you further information.

Atlas

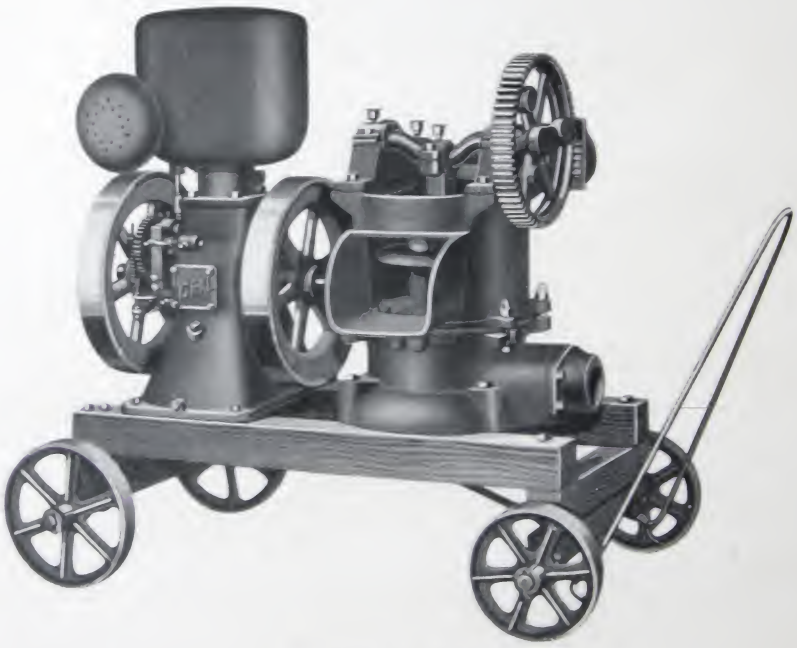
Diaphragm Pumps

A GREAT saving in time, can be made by using an Ideal Diaphragm Pumping outfit. These outfits are especially adapted for pumping water from trenches where there is considerable mud and gravel in the water, as the pumps have large water ways and are fitted with rubber diaphragm of the best quality and made especially for this class of work.

The suction valve is of metal with a rubber facing and is very accessible.

We furnish these pumps with side suction connections, but can furnish bottom suction connection if so specified without extra cost.

The following illustration and specifications show clearly the neat and compact arrangement of these units, and we highly recommend any of these outfits as they have proven to be highly successful for municipal work and contracting.



MOUNTED ON TRUCK

Specifications

Outfit No.	H. P. Engine	Pump No.	Capacity Gallons Per Hour	Size Suction Inches	Net Weight	Shipping Weight	Code Word
4DT	2½	4	4500	4	725	825	Dee
3DT	2½	3	3000	3	650	750	Dell

Specifications

MOUNTED ON SKIDS

Outfit No.	H. P. Engine	Pump No.	Capacity Gallons Per Hour	Size Suction Inches	Net Weight	Shipping Weight	Code Word
4DS	2½	4	4500	4	625	690	Did
3DS	2½	3	3000	3	540	600	Dont

The Schramm Portable Air Compressor Outfit

THE Schramm Portable Compressor Outfits represent the highest grade, most efficient and most convenient portable air plants ever produced. A glance at the cut above will show you how simple, compact, solidly built and accessible these outfits are.

The various uses for pneumatic tools, such as chipping, cutting and splitting stone, caulking, riveting, drilling on pipe, boiler or structural work and other purposes, have made a demand for outfits that are easily moved about.

All power on the Schramm Compressor Outfits is transferred directly to the air cylinder. No power is lost in the use of gears, chains or belts. Noise is also overcome and much less space is required.

Low in construction, securely fastened to the steel truck with pressure tank also securely attached. We do not have long, shaky pipe connections which come loose and cause leaks and delays.

The entire outfit is automatic in its operation. Both air-pressure and speed will remain constant at whatever point they may be set. Start the machine in the morning and it takes care of your variable loads all day, without any further adjustment.

Specifications No. 1 Outfit

Engine—4 cycle, horizontal, water cooled, 4-inch bore, 4-inch stroke, 2½ H. P.
Compressor—Single acting, water cooled, 3½-inch bore, 4-inch stroke, 14 cubic feet of air.
Capacity—1, 2 or 3 tools
Cost to run—1½c per hour per tool
Weight—750 lbs.
Automatic air regulation
Speed—250-660 revolutions per minute
Mounted on all-metal truck.
Fuel—Gas or gasoline preferred
Length—5 feet
Width—2 feet 6 inches
Height—2 feet 6 inches
Air tank—12 inches by 30
Pressure—from 30-100 lbs.
Guaranteed for 1 year
Free trial allowed
Fully equipped with drip cocks, safety valve and pressure gauge
Price on application

Specifications No. 2 Outfit

Engine—4 cycle, horizontal, water cooled, 5-inch bore, 6-inch stroke, 3½-5 H. P.
Compressor—Single acting, water cooled, 4-inch bore, 6-inch stroke
Capacity—24 cubic feet of free air per minute.
Fuel consumed 2½-5 gallons per day
Weight—1200 pounds.
Automatic air regulation.
Speed—250-550 revolutions per minute.
Mounted on all-metal truck
Fuel—Gas or gasoline preferred
Length—5 feet 10 inches
Width—3 feet 2 inches
Height—3 feet 2 inches
Air tank—16x30 inches
Pressure—from 30-125 pounds
Guaranteed for 1 year
Free trial allowed
Fully equipped, with drip cocks, safety valve and pressure gauge
Price on application

Specifications No. 3 Outfit

Engine—4 cycle, horizontal, water cooled, with radiator and fan auxiliary. 5½-inch bore, 7-inch stroke, 5-7 H. P.
Compressor—Single acting, water cooled, 4¾-inch bore, 7-inch stroke.
Capacity—40 cubic feet of free air per minute.
Fuel consumption—3-8 gallons per day.
Weight—2200 lbs.
Automatic regulation.
Speed—250-575 revolutions per minute.
Mounted on all-metal truck.
Fuel—Gas or gasoline preferred
Length—7 feet 6 inches.
Width—4 feet 6 inches.
Height—4 feet
Air tank—20x36 inches.
Pressure—30-100 lbs.
Guaranteed for 1 year.
Free trial allowed.
Fully equipped, with drip cock, safety valve pressure gauge and all fittings.
Price on application.

Atlas

U. S. Two Stage Portable Air Compressor

Equipment 35. Capacity 4 Cu. Feet Per Minute

THIS outfit is complete and ready to operate when plug is screwed into any lighting socket. It is very durably built but is nevertheless neat in appearance and very easily moved from place to place. Length is 36 inches and width 24 inches. In garage work, particularly under congested conditions, it is frequently desirable to take the air to cars in inaccessible places and this outfit is specially designed for this service.

Equip	Capacity per Minute	Size Low Press. Cyl.	Size High Press. Cylinder	Work Press Lbs	Size Motor	R P M	Diam	Floor Space			Ship'g Wt.	Boxed Net Wt.
								L'gth	W'th	H'gth		
De Luxe	4 Cu. Ft.	3x3	1½x3	300	½ H P.	250 to 350	16½	48	20	40	640	400

Send for special CATALOGUE and PRICES.

U. S. Two Stage De Luxe Complete Automatic Air Unit

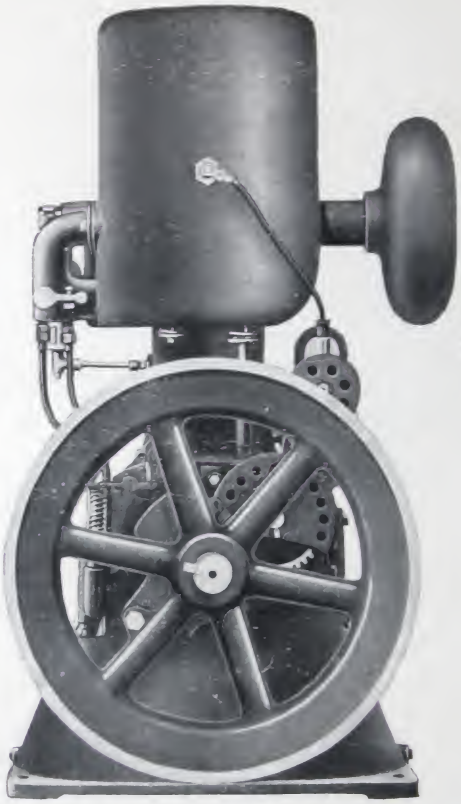
THIS is, without question, the most highly refined and improved air compressor unit in existence and the one we strongly recommend above all others for free air service. The garageman who buys a De Luxe Unit will settle his air troubles for all time.

It exactly meets the needs of a large majority of garages as evidenced by the fact that we are selling more of this one outfit than all the others combined. The exclusive features of refinement appeal to everyone and this De Luxe has been adopted as standard equipment for all their installations by several companies of international prominence.

Atlas

Ideal Engine

Sizes 2½, 3½, 4½, 6, 8, and 10 H. P.



Magneto Side of Ideal engine.

ACCESSIBLE MAGNETO AND BRACKET

Ideal engines are not regularly equipped with magneto, but the crank case is so designed that the magneto bracket can be readily attached without changing other parts of the engine. Note the illustration. Often parties having battery equipment wish to change to magneto equipment, and with our construction the magneto can be attached without having to send the engine to the factory to do so. All engines are equipped with batteries as standard equipment, but the magneto and bracket will be furnished at additional cost if so specified.

Write Us For Prices.